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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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10/801,575

03/17/2004

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EXAMINER

IQBAL, KHAWAR

ART UNIT

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2617

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03/14/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/801,575 | Applicant(s) WATANABE ET AL. | |
| | Examiner KHAWAR IQBAL | Art Unit 2617 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-19,21-26,34,35 and 41-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-19,21-26,34,35 and 41-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12-6-07 has been entered.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 41-52 are rejected under 35 U.S.C. 102(e) as being anticipated by Satoh et al (20050177978).

Regarding claim 41 Satoh et al teaches a folding electric device comprising (fig. 11):

- an upper unit (101a);
- a lower unit (101b);
- a connecting member that electrically connects said upper unit to said lower unit;

and a hinge that connects said upper unit to said lower unit (par. # 0081, figs. 11 and 14),

wherein said hinge comprises (101c):

a perpendicular opening and closing shaft to perpendicularly open and close said upper unit with respect to said lower unit (para. 0066, figs.1-3); and

a horizontal rotation shaft, connected to said lower unit, to horizontally rotate said upper unit with respect to said lower unit (figs. 5-6),

wherein said upper unit comprises: a first engagement portion having said perpendicular opening and closing shaft inserted therein, wherein the connecting member is wound in a space on an extension line of one end side of the perpendicular opening and closing shaft (para. # 81, figs. 11 and 14).

Regarding claim 42 Satoh et al teaches wherein said horizontal rotation shaft is connected to said lower unit vertically to a surface of said lower unit (see fig. 11).

Regarding claim 43 Satoh et al teaches wherein said horizontal rotation shaft is located between said first and second engagement portions (see figs. 11-12, para. # 0073-0074).

Regarding claim 44 Satoh et al teaches wherein said first engagement portion and second engagement portion are formed separately from each other (see figs. 11-12 and 14, para. # 0073-0038).

Regarding claim 45 Satoh et al teaches wherein said connecting member is wound around said horizontal rotation shaft (para. # 0081, figs. 12 and 14).

Regarding claim 46 Satoh et al teaches wherein said connecting member is a winding flexible board (para. # 0081, figs. 12 and 14).

Regarding claim 47 Satoh et al teaches further comprising an operation input section, mounted on said hinge and electrically connected to said winding flexible board so that a user can operate said operation input section when said folding electric device is in a folded state (para. # 0081, figs. 11, 12 and 14).

Regarding claim 48 Satoh et al teaches wherein said folding electric device is a folding mobile phone (para. # 0060).

Regarding claim 49 Satoh et al teaches further comprising a display arranged on said upper unit (see fig. 11, element 114).

Regarding claim 50 Satoh et al teaches further comprising input keys arranged on said lower unit (see fig. 11, element 110b).

Regarding claim 51 Satoh et al teaches further comprising a bobbin, arranged between said horizontal rotation shaft and said base, for winding said winding flexible board around said horizontal rotation shaft (para. # 0081, figs. 11, 12 and 14).

Regarding claim 52 Satoh et al teaches further comprising flexible board fixing member for fixing said flexible board to said hinge (para. # 0081, figs. 11, 12 and 14).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 16-19, 21-26, 34-35 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Choi (6867961) and further in view of Nonaka (20040127269).

Regarding claims 16, 40 Choi teaches a folding electric device (portable computer) comprising (figs. 1-3):

an upper unit (20); a lower unit (10) (fig. 3);

a connecting member that electrically connects said upper unit to said lower unit (col. 3, lines 22-30); and

a hinge that connects said upper unit to said lower unit, wherein said hinge comprises (col. 3, lines 30-58):

a perpendicular opening and closing shaft to perpendicularly open and close said upper unit with respect to said lower unit (fig. 1, col. 3, lines 30-58);

and

a horizontal rotation shaft, connected to said lower unit, to horizontally rotate said upper unit with respect to said lower unit, wherein said upper unit comprises (fig. 2, col. 2, lines 1-35):

a first engagement portion being adapted to have said perpendicular opening and closing shaft inserted therein (figs. 2 and 3, col. 4, line 35-col. 5, line 2); and

a second engagement portion being adapted to have said connecting member arranged therein (figs. 2 and 3, col. 4, line 35-col. 5, line 2); first and second brackets which are fixed to the horizontal rotation shaft, wherein the first brackets supports the perpendicular opening and closing shaft (figs. 2 and 3, col. 4, line 35-col. 5, line 2).

Choi does not specifically teach connecting member is inserted into said second engagement portion.

On the other hand Nonaka from the same field of endeavor, discloses connecting member (connecting member 8) is inserted into said second engagement portion (figs.1-5, para. # 0011, 0017-0020). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Choi by specifically adding feature connecting member is inserted into said second engagement portion in order to enhance communicating with a display portion and main portion foldably and electrically connected to each other through a connection member of a portable device as taught by Nonaka.

Regarding claim 17 Choi teaches wherein said horizontal rotation shaft is connected to said lower unit vertically to a surface of said lower unit (figs. 2 and 3, col. 4, line 35-col. 5, line 2).

Regarding claim 18 Choi teaches wherein said horizontal rotation shaft is located between said first and second engagement portions (fig. 3, col. 2, lines 1-35).

Regarding claim 19 Choi teaches wherein said first engagement portion and second engagement portion are formed separately from each other (fig. 3, col. 2, lines 1-35, col. 4, line 35-col. 5, and line 2).

Regarding claim 21 Choi teaches wherein said connecting member is wound around said horizontal rotation shaft (figs. 2-3, col. 2, lines 1-35, col. 4, line 35-col. 5, and line 2).

Regarding claim 22 Choi teaches wherein said connecting member is a winding flexible board (col. 3, lines 22-30).

Regarding claim 23 Choi teaches further comprising an operation input section, mounted on said hinge and electrically connected to said winding flexible board so that a user can operate said operation input section when said folding electric device is in a folded state (col. 3, lines 22-30, col. 2, lines 1-35, col. 4, line 35-col. 5, line 2).

Regarding claim 24, Nonaka discloses mobile phone (fig. 1).

Regarding claim 25 Choi teaches further comprising a display arranged on said upper unit (portable computer, fig. 1, element 22).

Regarding claim 26 Choi teaches further comprising input keys arranged on said lower unit (portable computer, fig. 1, element 12).

Regarding claim 34 Choi teaches further comprising a bobbin, arranged between said horizontal rotation shaft and said base, for winding said winding flexible board around said horizontal rotation shaft (col. 3, lines 22-30, col. 2, lines 1-35, col. 4, line 35-col. 5, line 2).

Regarding claim 35 Choi teaches further comprising flexible board fixing member for fixing said flexible board to said hinge (col. 3, lines 22-30, col. 2, lines 1-35, col. 4, line 35-col. 5, line 2).

Response to Arguments

5. Applicant's arguments with respect to claims 16-19, 21-26, 34, 35 and 41-52 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Khawar Iqbal whose telephone number is (571) 272-7909.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, George Eng can be reached on (571) 272-7495. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Khawar Iqbal

/George Eng/

Supervisory Patent Examiner, Art Unit 2617